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EWING GALLOWAY

FROM FARMS AROUND BUCHAREST, WOMEN BRING PRODUCE FOR SALE IN THE CITY'S MARKETS

This smiling pair is homeward bound from Romania's capital with empty baskets and full purses. The one at left wears a manufactured shawl around her head, indicating the influence of the city. Many Romanian farmers make all their clothing, including shoes (Bulletin No. 5).

Bulletin No. 1, January 26, 1948

California Observes Gold Centennial

THE cry of "Gold!" that rang across remote California a century ago is being echoed this year in observance of the boom which created a great western empire—today one of the richest and most populous states in the Union.

Following James Marshall's famous discovery in the Sutter millrace at Coloma on January 24, 1848, lucky prospectors washed fortunes from streambeds. With crude knives, some dug the gold out of hillside veins; others met only disappointment and ruin.

Ten-dollar Pies and Thousand-dollar Rooms

A surer road to wealth was catering to the needs of the gold searchers who poured into California after beating their way across the still largely unsettled continent, sailing around Cape Horn, or struggling by muleback across Panama.

At the little port of San Francisco, where battered "Forty-niners" landed in overcrowded, ill-provisioned sailing ships, rooms rented for $1,000 a month. A pound of beans sold for $2 and a homemade pie for $10. With virtually all able-bodied men off to the gold diggings, wages for even the most menial tasks jumped to fantastic heights.

It was not until 1850 that California came into the Union. But already, seen dimly through the golden mist, this region had an international past. On its soil the flags of Spain, England, Tsarist Russia, and Mexico had been planted. In 1846 a little band of Americans briefly raised a homespun emblem of the "Bear-Flag Republic."

At the time of Marshall's epoch-making discovery, California had not yet been formally relinquished by Mexico. It was nine days later, on February 2, 1848, that the peace treaty following the Mexican War turned over this valuable region to the United States.

Gold Now Overshadowed by Agriculture

In its century of development as part of the United States, California has seen transcontinental railways reach the Pacific and airplanes fly from coast to coast in a few hours. The sleepy village of San Francisco has grown to a busy world port. Los Angeles, from a town of slightly more than 1,000 inhabitants, has mushroomed into a metropolis of more than 1,800,000—one of the nation's great cities.

California's agriculture, climate, scenery, factory products, and movies have overshadowed the original output of the "Golden Empire." The state leads the nation in large-scale commercial farming and in variety of crops (illustration, next page). The redwood country north of San Francisco is one of the most active lumbering regions in the United States (illustration, inside cover).

However, gold is still an important state asset. In the Mother Lode counties, a modern gold industry carries on with deep mines and giant

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B. ANTHONY STEWART

TWO PALACES OF WOOD IN EUREKA, CALIFORNIA, LOOK OUT ON PILES OF GREEN LUMBER STACKED FOR DRYING

Each room in the castlelike home is finished with a different wood. Redwood burls, knots of fantastic designs, decorate the house at the right. South of Eureka, in Founders' Grove, stands a redwood 364 feet high, the tallest tree in the world. Eureka grew as a center of the redwood lumber industry (Bulletin No. 1).

Bulletin No. 2, January 26, 1948

Arnhem Land's Stone-Age Life to be Studied

A SCIENTIFIC expedition to study Arnhem Land, little-known corner of northern Australia, where some of the world's most primitive tribes live in a Stone-Age environment, has been announced by Dr. Gilbert Grosvenor, President of the National Geographic Society.

The Society and the Smithsonian Institution will join with the Commonwealth of Australia in the project. Its purpose, as stated by Dr. Grosvenor, is to fill in the blank in human knowledge represented by this Maine-size aboriginal reserve east of Darwin.

Water Approach Is Necessary

The expedition will take the field when the rainy season ends in March. It will study the primitive natives (illustration, next page) and the mammal, bird, fish, insect, plant, and marine life through the dry season, normally ending in late October.

There are no passable trails for trucks or automobiles in the northeastern corner of Australia's Northern Territory, which contains Arnhem Land. The expedition will approach the reserve by small schooner. It will debark at points on the shores of Van Diemen Gulf, the Arafura Sea, and the Gulf of Carpentaria. Natives will serve as porters for journeys inland.

Of five bases selected for the expedition's use, one especially suited for study of marine life is on Groote Eylandt (Big Island), just off Arnhem Land's east coast in the Gulf of Carpentaria.

Other bases are at the heads of navigation of mainland streams, where Christian missions established early in the century have been allowed to remain. These settlements are lonely exceptions to the rule forbidding white men to live in the reservations for aborigines.

Arnhem Land corresponds in its tropic-zone position to Nicaragua. Its winter dry-season climate might be compared to summer in the southern United States. Discovered in 1623 by Dutch explorers, the interior region remains virtually unmapped, and unexplored except from the air. Although a few exploring parties have penetrated inland, their reports have been meager, scientifically.

Wooden Spears Serve as Weapons

In recent years the aboriginal tribes have been absolved to some degree of a mythical reputation as bad men, killers, and cannibals. They may fight on slight provocation, but are now described as generally friendly, extremely wary, and hard to approach except by persons they know.

The Arnhem Land natives do not use bow and arrow. Their own variety of wooden spear and throwing stick serves them for hunting, fishing, and as protection against intruders.

True Stone-Age wild men, they have lived the same primitive life down the centuries amid Stone-Age birds, beasts, and reptiles. Mixed blood is evident only on coasts where equally wild Papuans have crossed the water from near-by New Guinea.

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dredges, amid the ghost towns and quiet villages that once echoed to the shouts of the bearded, red-shirted miners.

In 1941, before the enforced wartime shutdown, California recovered nearly $10,000,000 worth of gold. The industry is now gradually reviving, though hampered by expenses and shortages in man power and equipment.

From such boisterous settlements of the Forty-niners as Angel Camp, Red Dog, and Last Chance came some of America's liveliest literature. Mark Twain's *Jumping Frog of Calaveras County*, and Bret Harte's *Luck of Roaring Camp* were among the lusty tales inspired by California's early days.

NOTE: California is shown on the National Geographic Society's map of The Southwestern United States. Write the Society's headquarters, Washington 6, D. C., for a price list of maps.

For further information, see "Indians of the Far West," in the *National Geographic Magazine* for February, 1948; "More Water for California's Great Central Valley," November, 1946; "San Francisco: Gibraltar of the West Coast," March, 1943*; "California Says It with Wild Flowers," April, 1942; "San Diego Can't Believe It," January, 1942; "California's Coastal Redwood Realm," February, 1939*; and "Northern California at Work," March, 1936. *(Issues marked with an asterisk are included in a special list of Magazines available to teachers in packets of ten for $1.00.)*

CALIFORNIA STATE CHAMBER OF COMMERCE

NEARLY AS MANY NATIONALITIES WORK IN CALIFORNIA FIELDS AS THERE ARE CROPS TO HARVEST

From all over the world, workers are attracted to the Great Central Valley's 59,000 irrigated farms where 220 different crops grow. These men cut celery in the fertile Sacramento River delta. One wears turban and beard as in his Oriental homeland. Next week they may be a few miles away bringing in another fruit, grain, or vegetable crop. The valley's food goes east either in refrigerator cars or is processed locally and then shipped.

Bulletin No. 3, January 26, 1948

Greek Mountain Towns See Guerrilla Warfare

CONTINUED fighting between government troops and guerrilla forces in Greece's northwestern border region keeps in the news the names of two ancient mountain-valley towns which have had little previous publicity—Kónitsa and Ioánnina (Yanina).

Kónitsa, the town from which guerrillas were driven during the last week of the old year, stands in rugged country gashed by ravines and deep valleys. The town lies in a valley nearly 2,000 feet above sea level.

Native Stone Houses Kónitsa's Residents

There are no railroads in this embattled region near the Albanian border, and few good roads. A highway, badly damaged in the fighting, extends from Kónitsa eight miles west to the main road running north into Albania from Ioánnina. Donkey paths wind through the mountains.

Kónitsa's outstanding feature is a single-arch bridge spanning the Aoos River, 65 feet above the water. Most of the houses are of stone from local quarries. On some of them, balconies extend from the second stories out over the narrow cobbled streets. Cypress trees and minarets rise above tiled roofs. Still higher looms the mountain background.

Many townspeople are farmers. They live in the village and tend their vineyards and wheat fields on its outskirts, and pasture their sheep and goats in the uplands.

Kónitsa is at the precipitous mountain edge of a plain. Because of its relatively isolated position, the town has retained many old customs. On holidays the women wear the fashions of their ancestors. They take particular pride in the apron decorated with velvet embroidery, which in many cases has descended from mother to daughter.

During the days of Turkish rule, a large palace stood on the northern side of the town. The palace has long been in ruins, and the northwest section of the town itself was almost destroyed in the recent fighting. Kónitsa was once part of Albania, but Greek has remained the common language of the people.

Mt. Mitzekeli Towers over Ioánnina

Ioánnina lies 1,500 feet above sea level in a valley 20 miles long. It is 25 miles southeast of the nearest dip of the Albanian border. The valley parallels and lies 35 miles inland from the Ionian Sea.

Albanians, Vlachs, and Jews, as well as Greeks, form large sections of the population of this city of 20,000 people. Capital and chief city of Epirus province, Ioánnina borders the western shore of shallow Lake Ioánnina, six miles long and three miles wide. Majestic Mt. Mitzekeli, rising 4,300 feet on the lake's opposite shore, dominates every view. Beyond the peak the Pindus Mountains march northward into Albania.

Served in prewar days by commercial airlines and fair automobile roads, Ioánnina has no railroad. Although not industrially important, activities of the townspeople included leather tanning, fur dressing, and gold and silver filigree work. Grain, grapes, and silkworms are the farm

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In this land of varied terrain, only these nomadic natives are geared for travel. Mangroves fringe countless bays and estuaries infested with crocodiles, snakes, leeches, and mosquitoes. Tall spear-grass borders flood areas, quagmires, and tortuous streams. A succession of dense scrub forests, deep watercourses, and low ranges often rising in sheer rocky bluffs thwarts progress inland.

Charles Pearcy Mountford, ethnologist of the South Australia Museum at Adelaide, will lead the expedition. Mr. Mountford has captained various anthropologic and ethnologic expeditions to Australia's wild regions and is an authority on the aboriginal art, customs, and culture of the island continent.

Smithsonian Institution staff members who will study in their chosen fields include Frank M. Setzler, head curator of the department of anthropology, and Dr. David H. Johnson, associate curator of the division of mammals. Harrison Howell Walker, National Geographic staff writer-photographer with several years of Australian experience, will travel with them. Throughout the field research they will be associated with Australian naturalists.

DONALD F. THOMSON

BABY RIDES BAREBACK IN ARNHEM LAND

Father and mother alternately share the prized load as the tribe travels. This is a favored method of carrying junior. Australian aboriginal children are petted and spoiled by everyone, and are always well fed.

NOTE: Arnhem Land appears on the Society's map of Asia and Adjacent Areas. A map of Australia will appear as a supplement to the March issue of the Magazine.

For further information on Australia, see "Earth's Most Primitive People," in the *National Geographic Magazine* for January, 1946; "American Bombers Attacking from Australia," January, 1943*; and "Life in Dauntless Darwin," July, 1942.

See also, in the GEOGRAPHIC SCHOOL BULLETINS, November 19, 1945, "Darwin, Australia's Sea Gate and Defense Key, Plans Expansion."

Bulletin No. 4, January 26, 1948

U. S., China, Exchange Ginseng and Ginger

CHINESE ginger, from which the first gingerbread men were made centuries ago, is again coming to the United States from Hong Kong. America, in turn, has resumed shipping ginseng to China. The "golden weed," regarded as a cure for many ills, figured in the first shipment of goods from the United States to China.

Ginger is one of the "big five" that normally make up nine-tenths of the trade volume of the 25 common spices. Its use dates back to early Greek and Roman times. Made into shapes of men, animals (illustration, next page), and letters of the alphabet, gingerbread was delighting the children of England at Christmas time as early as the 15th century.

Ginger Comes from Plant Root

Henry VIII of England included ginger in a recipe sent the Lord Mayor of London as a remedy against the plague then ravaging the city. English tavern keepers kept perforated containers of ginger so that customers could sprinkle it on their ale and porter. The spice was imported from France and Germany perhaps as early as the 9th century. In the United States, ginger was once particularly popular in New England.

The ginger of commerce comes from the underground rootlike stem of the plant *(Zingiber officinale)* which grows to a height of two or three feet in the rich, well-watered soil of tropical countries. It yields 700 to 1,500 pounds of the dried spice to an acre in one year.

Before World War II the United States imported from China, Cuba, Jamaica, India, and British Africa 4,000,000 pounds of dried and preserved ginger in a year—more than four times the amount of 25 years earlier.

Ginger was introduced into the Western Hemisphere by Spaniards in Jamaica and Mexico. Jamaica exported it to Spain at least 400 years ago.

First New York-to-China Ship Carried Cargo of Ginseng

Candied ginger has long been popular. Ground ginger is used in gingerbread and gingersnaps. It seasons pot roasts and other meats, is used in pickling, puddings, and some soups. Tons go into ginger ale.

Resumption of ginseng shipping from the United States to China recalls one of the earliest chapters of American foreign trade. The first ship that sailed direct to China from the United States—the *Empress of China*, out of New York in 1784—carried more than 20 tons of ginseng. It grew wild in New England woods and along the Hudson River banks.

The weed was scarce in the Orient, where it was highly prized. Once ginseng was worth its weight in gold, and for a long time China's royalty had exclusive rights to it. In Manchuria it grew in imperial preserves. Special details of soldiers collected it.

Orientals consider the withered root a remedy for various ills, although American scientists have said it has no curative value. As recently as 1940, America sent China more than $1,000,000 worth.

When the Dutch East India Company learned, early in the 18th century, of the Orient's demand for ginseng, it began a world-wide search for other

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products of its dry, stony plain. The summer heat is briefer and winter temperatures drop lower than in other parts of Greece.

Part of the Ottoman Empire from the mid-15th century until 1913, Ioánnina retains a Turkish aspect in its narrow streets. Moslem mosques, Christian churches, and Jewish synagogues share the scene with various ruins of Ioánnina's hectic past. Many of its citizens cling to the customs and costumes of their ancestors (illustration, below).

Falling to the Byzantine Empire in the 9th century, Ioánnina suffered from Norman raids in the 11th and 12th centuries. These invaders from western Europe sought to establish a kingdom on the Mediterranean like that which William the Conqueror founded in the British Isles. Serbs pillaged the town; and, in 1430, the Turks claimed it.

Early in the Turkish regime, Jews settled in Ioánnina. They witnessed the town's heyday, from 1788 to 1822. It was then the seat of the fabulous court of the Albanian chieftain, Ali Pasha, the "Lion of Yanina," who built a fortress-castle on a promontory jutting into the lake. Under Ali's rule the town swelled to a population of 50,000. As many as 1,500 people were daily fed at the palace. Six hundred of them were the wives composing Ali's harem.

NOTE: Kónitsa and Ioánnina may be located on the Society's map of Europe and the Near East.

For further information, see "Erosion, Trojan Horse of Greece," in the *National Geographic Magazine* for December, 1947; "The Greek Way," March, 1944; and "Classic Greece Merges into 1941 News," January, 1941.*

MAYNARD OWEN WILLIAMS

MOUNTAIN, PLAIN, AND ISLAND BEQUEATH TO GRECIAN WOMEN THREE TRADITIONAL COSTUMES

"Dressed-up" in gala attire which has come down from their grandmothers, these modern Greeks represent three widely different localities of the nation. The laughing lady (left) inherits her outfit from the island of Astypalaia in the Aegean; women of Macedonia originated the dress in the center; and from Ioánnina came the long, heavily embroidered jacket of the woman on the right. Her tasseled pillbox copies the style of hat worn by Amalie, first queen of modern Greece.

Bulletin No. 5, January 26, 1948

Romanian King Quits Land of Wheat Farmers

WITH the abdication of King Mihai (Michael) and his departure for Switzerland, Romania became the latest of the eastern European states to discard its monarchy. The Danubian land is now a "People's Republic."

Nucleus of the erstwhile kingdom is the fertile grain-growing region of foothills and lowlands bounded by the Danube on the south, the Prut River on the east, and the great crescent of the Carpathians and the Transylvania Alps on the west and north. This was the Romania born in 1859 of the union of the provinces, Wallachia and Moldavia.

Large Estates Broken up, Cooperatives Formed

This core of Romania normally harvests wheat and corn in far greater tonnage than the golden grain plain of Hungary across the mountains to the northwest. Barley, oats, and rye add to the Romanian grain flow. The calamity of drought, however, brought famine and extreme hardship to the Romanian people in both 1946 and 1947.

To meet an economic crisis after World War I, in which Romania was on the winning side, laws were passed breaking up large estates into farm units of 200 acres or less. Too many tiny farms, however, lessened production efficiency, and only after the introduction of farm cooperatives in the 1930's did grain yields surpass old levels of the big estates.

Timber, most plentiful on the Transylvania plateau, has been a big export crop. Measures have been taken in recent years to prevent too rapid depletion of forest stock. Mineral wealth, comparatively unexploited, includes abundant bauxite (aluminum ore), copper, lead, iron, zinc, gold, coal, and lignite (brown coal).

Petroleum flows from wells along the foothills of the Transylvania Alps in greater volume than elsewhere in Europe west of the U. S. S. R. It is refined at Ploeşti, 35 miles north of the Romanian capital and chief city Bucharest (Bucureşti). Germany, having no other good source of oil, worked the Romanian wells to the fullest for its war machine. The big surprise air raid by the Allies on Ploeşti refineries in August, 1943, was a major disaster for the Axis.

Few Large Cities

Bucharest, in southern Romania, counts close to 1,000,000 people. Like Vienna, it earned a reputation as a gay and lighthearted city. Located in its country's breadbasket, it traditionally was well fed and had an abundance of white bread. Now even fragments of black bread are scarce and, since 1946, hunger has been rampant in the city whose big industry was flour-milling.

Ploeşti, Iaşi, Cluj, Timişoara, Brăila, and Galati are scattered Romanian cities of about 100,000 people each. Constanţa is the country's port on the Black Sea coast.

Cities, however, are a small part of the whole. The simple, hard-toiling farmers (illustration, cover) constitute four-fifths of the population.

sources of the drug or a substitute. They found Indians gathering a similar root in the hills near Stockbridge, Massachusetts.

At Albany, New York, Dutch merchants bartered rum and trinkets for it with the Indians. Dutch ships carried it down the Hudson and overseas to Amsterdam. From there, part of the ginseng went to Portugal's Macau on the South China Sea coast, first port in the area opened to Western trade.

Some American ginseng went to the English East India Company, which also had offices at Macau. No commodity proved more profitable than ginseng, which yielded a return of more than 500 per cent.

In time, ginseng became the United States' most valuable export to China. Yankee clipper ships carried as much as 4,000,000 pounds a year, returning with tea, silk, rice, and other products of the Far East.

Ginseng later was found growing wild in varying abundance from Maine to Minnesota, and southward in the mountain regions to Georgia. As the wild root disappeared, commercial growers began to cultivate it.

NOTE: Regions where ginger and ginseng grow may be located on the Society's World Map.

MAYNARD OWEN WILLIAMS

GINGER FLAVORS A COOKIE PIG, SOLD AT THE PARIS GINGERBREAD FAIR

Of all the popular figures into which gingerbread is cut, the pig tops the list at this street carnival in Paris. Sister and brother intently watch every stroke of the "pen" as it inscribes her name in shiny frosting on the flank of the cookie animal. The pig will be her special property for its lifetime, however short and sweet that may be.

GEOGRAPHIC MAPS—TIMELY AIDS TO EDUCATION

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Living in neatly whitewashed, thatched cottages, they make housefurnishings, linens, clothes, shoes, and raise food for their modest needs. They weave rugs to sell in the city (illustration, below). On winter nights, they gather to sing, play musical instruments, and tell the legends of their ancestors.

In the clutch of circumstances, Romania as an Axis satellite lost in 1940 and regained in 1941 much of the land it had acquired as a result of joining the Allied side of World War I in 1916. With the turn of World War II tide in 1944, Romania again lost important areas before switching actively to the United Nations cause. Peace terms gave the state about 90,000 of the 114,000 square miles it held between wars.

NOTE: Romania appears on the Society's Map of Europe and the Near East.

For additional information, see "Caviar Fishermen of Romania," in the *National Geographic Magazine* for March, 1940; "An American Girl Cycles Across Romania," November, 1938*; and "The Spell of Romania," April, 1934.

R. RAFFIUS

A WALL OF RUGS IN BUCHAREST'S OPEN-AIR MARKET DISPLAYS ROMANIA'S BEST WEAVING

The rural artisans who pattern these imaginative pieces prize them too highly to walk on them. Instead, they hang their carpets on walls as tapestries or throw them over tables and beds as spreads. Romanian weavers borrowed pattern ideas from Oriental rugmakers in the 16th century.